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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,622	04/22/2004	Eric Lawrence Barsness	ROC920040065US1	7310
30206	7590	10/28/2008		
IBM CORPORATION ROCHESTER IP LAW DEPT. 917 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829			EXAMINER CAO, DIEM K	
			ART UNIT	PAPER NUMBER
			2194	
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			10/28/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/829,622	<b>Applicant(s)</b> BARSNESS ET AL.	
	<b>Examiner</b> DIEM K. CAO	<b>Art Unit</b> 2194	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 17-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-3 and 17-19 are pending. Applicant has amended claims 1-3 and 17-19 and canceled claims 4 and 20-28.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/13/2008 has been entered.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-3 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford (U.S. 7,080,051) in view of APA (Admitted Prior Art) further in view of Davidson (Dynamic Resource Brokering for Multi-User Query Execution).**

As to claim 1, Crawford teaches a method comprising:

- determining whether a first task in a computer system is allowed to use a service-enabled resource (Where a particular command is ... “customer computer”; col. 20, line 55 – col. 21, line 5), wherein the service-enabled resource is disabled until a fee is paid (Online service system ... return for fees; col. 14, lines 49-51 and Customers can be charged a flat fee; col. 69, line 5), wherein a plurality of tasks execute in the computer system (), wherein the first task is one of the plurality of tasks ());
- if the first task is allowed to use the service-enabled resource, allocating the service-enabled resource to the task (commands inputted at the customer computer keyboard 56 will be executed by the replica computer 160 processor if the “processor flag” at the customer computer is set to “replica computer”; col. 20, lines 61-64), wherein the service-enabled resource comprises a processor in the computer system (One-line service system 100 also includes at least one (and typical many) “replica computer” 160; col. 17, lines 20-31, the replica computer(s) 160 connects to the customer computer 50; col. 17, lines 48-50), wherein the allocating further comprises dispatching the first task to the processor (commands inputted at the customer computer will be executed by the replica computer 160 processor if the processor flag at the customer computer 50 is set to “replica computer”; col. 20, lines 61-64, thus, the first task/command is dispatched to the processor of the replica computer), wherein the allocating further comprises checking a data structure (table) comprising a plurality of tasks identifiers of the plurality of tasks and respective service-enabled indicators (command, “processor flag”, “customer computer”, “replica computer”; col. 20, lines 55-64, col. 21, lines 6-10 and each computer needs to identify ... where commands are supposed to execute; col. 24, lines 7-

12), wherein some of the plurality of tasks identifiers indicate that their respective tasks are allowed to use the service-enabled resource (commands inputted at the customer computer will be executed by the replica computer 160 processor if the processor flag at the customer computer 50 is set to “replica computer”; col. 20, lines 61-64) and other of the plurality of task identifiers indicate that their respective tasks are not allowed to use the service enabled resource (commands inputted at the customer computer will be executed by the customer computer processor 68 if the processor flag at the customer computer 50 is set to “customer computer”; col. 20, lines 57-61); and

- if the first task is not allowed to use the service-enabled resource, allocating a non-service enable resource to the first task, wherein no fee is required to use the non-service enable resource (command inputted ... “customer computer”; col. 20, lines 57-61. Since the customer computer processor is not online service and owned by the customer, customer doesn't have to pay fee to use it.).

Crawford does not teach a multi-processor logically-partitioned computer system, wherein the multi-processor logically-partitioned computer system comprises a plurality of logical partitions, and wherein each of the plurality of logical partitions executes a different operating system, adding the processor to a shared pool associated with a first logical partition to which the first task belongs, wherein the first logical partition is one of the plurality of logical partitions.

However, APA teaches a multi-processor logically-partitioned computer system, wherein the multi-processor logically-partitioned computer system comprises a plurality of logical partitions, and wherein each of the plurality of logical partitions executes a different

operating system (a single physical computer is permitted to operate essentially like multiple and independent virtual computers, referred to as logical partitions, with the various resources in the physical computer allocated among the various logical partitions. Each logical partition executes a separate operating system; page 2, lines 1-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of APA to the system of Crawford because APA teaches a single computer system can be operated as multiple independent computers, thus, improve the performance of the computer.

Davidson teaches adding the processor to a shared pool associated with a partition to which the task belongs (via associating the resource / processor bandwidth to a query, thereby adding the resource / processor bandwidth to the resources / minimum resources already associated with the query) (see page 281 – 282, Introduction; pages 283-284, Resource Broker Framework, in particular, (page 283) “When the query does gain admission to the system, the operators in the query are permitted to bid for resources ... (page 284) When a query is scheduled, its operators become eligible to bid for resources under the control of the allocation policy. Each bidder, or operator is guaranteed some resource allocation: the amount of this allocation is a policy decision but is at least the minimum around the resources that the operator requires to execute ... Remaining resources are then sold to the highest bidder ... The broker dynamically adapts to changes in workload by adjusting previous resource allocation decisions, necessitating adaptable algorithms. The operators must bid for resources multiple times during their execution, where the result of a bid may be an increase, decrease, or no change in the operator’s previous allocation.”). It would have been obvious to one of ordinary skill in the art to apply the teaching of Davidson to the system of Crawford because Davidson teaches a method

Art Unit: 2194

that address the difficult problem of managing resources in a multiple-query environment composed of queries with widely varying resource requirement, and this method maximize system performance in a multi-user query environment because resources such as memory, disk bandwidth and processor bandwidth allocated effectively during execution (page 281, abstract and Introduction).

As to claim 2, Crawford, APA and Davidson do not explicitly teach wherein the first task checks a level of the respective operating system. However, Crawford teaches the tasks in the computer system in general term, and do not limit the tasks to certain type of tasks. It would have been obvious to one of ordinary skill in the art that the tasks in the system of Crawford can also include task that checks the level of the respective operating system.

As to claim 3, Crawford, APA and Davidson do not explicitly teach wherein the first task monitors performance. However, Crawford teaches the tasks in the computer system in general term, and do not limit the tasks to certain type of tasks. It would have been obvious to one of ordinary skill in the art that the tasks in the system of Crawford can also include task that monitors performance.

As to claim 17, see rejection of claim 1 above. Crawford further teaches configuring the computer to perform all the steps of claim 1 (computer customer 50; col. 16, lines 11-26 and col. 20, lines 55-64).

As to claims 18 and 19, see rejections of claims 2-3 above.

***Response to Arguments***

5. Applicant's arguments filed 8/13/2008 have been fully considered but they are not persuasive.

In the remarks, Applicant argued in substance that (1) Crawford does not teach “logically-partitioned computer system comprises a plurality of logical partitions, wherein each of the plurality of logical partitions executes a different operating system”, (2) Crawford does not teach “some of the plurality of tasks identifiers indicate that their respective tasks are allowed to use the service-enabled resource and other of the plurality of tasks identifiers indicate that their respective tasks are not allowed to use the service-enabled resource”, (3) Crawford does not teach “wherein the service-enabled resource is disabled until a fee is paid” because Crawford teaches in the Crawford’s system, the replica computer “when first activated ... loads appropriate communications software” prior to receiving “a customer access request”, and (4) Davidson does not teach “logically-partitioned computer system comprises a plurality of logical partitions, wherein each of the plurality of logical partitions executes a different operating system”, and does not teach “adding the processor to a shared pool associated with a first logical partition” because Davidson does not teach logical partitions.

Examiner respectfully disagrees with the arguments:

- As to the point (1), this is a newly added limitation, and this limitation is taught by Admitted Prior Art, as shown in the rejection of claim 1 above.



- As to the point (2), Crawford teaches some tasks have their associated "processor flags" show where the tasks are executed, thus, when the "processor flag" indicates "replica processor", then those tasks are allowed to use the service-enabled resource. In contrast, when the "processor flag" indicates "customer processor", then those tasks are not allowed to use the service-enabled resource. Therefore, the arguments are not persuasive.

- As to the point (3), Crawford teaches the on-line service system provides software and computer services to customer computer in return for fees (col. 14, lines 49-51), and the process that the user need to sign up before using the services (col. 68, lines 1-6), and the user needs to pay a fee prior to use the service, thus, the service is disabled until a fee is paid. For example, after selecting the service, then the replica computer is connected to customer computer, which happen after the fee is paid (col. 68, lines 12-50). Therefore, the arguments are not persuasive.

- As to the point (4), in the rejection, the limitations "logically-partitioned computer system comprises a plurality of logical partitions, wherein each of the plurality of logical partitions executes a different operating system" is taught by APA, not Davidson, and Davidson teaches "adding the processor to a shared pool associated with a logical partition", thus, the combination of Crawford, APA and Davidson teaches the claimed limitation.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEM K. CAO whose telephone number is (571)272-3760. The examiner can normally be reached on Monday - Friday, 7:30AM - 4:00PM.

Art Unit: 2194

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/  
Supervisory Patent Examiner, Art Unit 2195

DC  
October 21, 2008